

PARKIN-ASSOCIATED COMPLEX FOR PROTECTING POST-MITOTIC
NEURONS FROM EXCITOTOXICITY AND USES THEREOF

ABSTRACT OF THE DISCLOSURE

[00167] The present invention provides a parkin-associated complex. The present
5 invention further provides methods for promoting ubiquitination of cyclin E in neurons, for
decreasing cyclin E in neurons, for treating or preventing neurodegeneration in a subject, and
for protecting neurons from excitotoxicity. Additionally, the present invention provides a
therapeutic composition, and use of the therapeutic composition in an animal model. The
present invention further provides a method for identifying an agent which interacts with a
10 parkin-associated complex, agents identified by this method, and use of a parkin-associated
agent to protect neurons from excitotoxicity. Additionally, the present invention provides
methods for determining whether a subject has neurodegeneration, for assessing the efficacy
of therapy to treat neurodegeneration in a subject, and for assessing the prognosis of a subject
who has neurodegeneration. Finally, the present invention provides a kit for use in detecting
15 neurodegeneration.